

APPENDIX C

SAMPLING / ANALYSIS

Sampling containers, preservatives (for water samples) deionized water, sample labels, custody seals and sample log should be obtained from the laboratory performing the assays. The deionized water is used to clean appliances used in sample collection between each sample. The quantities are as follows:

- (a) sample containers = number required times two plus rinsate sample jars and at least six spares;
- (b) bottle of preservative;
- (c) at least two quarts of de-ionized water (use judgment here; cleaning implements rather than using single use throw aways requires more water);
- (d) quality control trip blank, and
- (e) sufficient coolers to transport iced down samples to the laboratory.

Once samples are collected, labeled, sealed and recorded, they are packed in coolers and iced down and sealed for shipment. Overland by personal or company van or auto is preferred although use of Federal Express or other carrier is acceptable. Warning labels and content tabs should be attached if shipped via commercial carrier. Shipment must arrive at the laboratory before ice melts.

A target list of analytes for extraction and assay should as a minimum consists of those in Table C.1.

TABLE C.1 TARGET ANALYTES FOR OPEN DETONATION SITES

a. Base/Neutral and Acid Compounds to be Analyzed Using USEPA Method 8270/625

COMPOUND	COMPOUND	COMPOUND
Bis(2-chloroethyl)ether 1,3-Dichlorobenzene 1,2-Dichlorobenzene 1,4-Dichlorobenzene Bis(2-chloroisopropyl)ether N-Nitrosodi-n-propylamine Hexachloroethane Nitrobenzene Isophorone Bis(2-chloroethoxy)methane 1,2,4-Trichlorobenzene * Naphthalene Hexachlorobutadiene 2-Chloronaphthalene * Dimethyl phthalate * 2,6-Dinitrotoluene * Acenaphthylene Acenaphthene * 2,4-Dinitrotoluene * Diethyl phthalate Benzidine 4-Bromophenyl phenyl ether N-nitrosodimethylamine Hexachlorocyclopentadiene	4-Chlorophenyl phenylether * Fluorene Azobenzene Hexachlorobenzene * Phenanthrene Anthracene Dibutyl phthalate * Fluoranthene * Pyrene * Butylbenzyl phthalate 3,3'-Dichlorobenzidine * Benzo(a)anthracene Chrysene * Bis(2-ethylhexyl)phthalate * Di-n-octyl phthalate Benzo(b)fluoranthene Benzo(k)fluoranthene * Benzo(a)pyrene Ideno(1,2,3-cd)pyrene * Dibenzo(a,h)anthracene Benzo(g,h,i)perylene * N-Nitrosodiphenylamine * Phenol 2-Chlorophenol	2-Nitrophenol 2,4-Dimethylphenol 2,4-Dichlorophenol 4-Chloro-3-Methylphenol 2,4,6-Trichlorophenol 2,4-Dinitrophenol * 4-Nitrophenol 2-Methyl-4,6-Dinitrophenol Pentachlorophenol ADDITIONAL COMPOUNDS: 1-Methylnaphthalene * Acetophenone * Diphenylamine 2-Aminonaphthalene * 1-Nitropyrene 2,5-Diphenyloxazole * 2-Nitronaphthalene OTHER COMPOUNDS: * 2-Methylnaphthalene 2-&/or 3-Methylphenol * 4-Methylphenol 2,4,5-Trichlorophenol

b. Metals to be Analyzed Using Method 6010

* • Copper	* • Barium	* • Cadmium
* • Lead	* • Nickel	* • Aluminum
* • Chromium	* • Potassium	* • Calcium
• Mercury	* • Zinc	• Titanium

c. Nitroaromatics and Nitramines to be Analyzed Using HPLC USEPA Method 8330

* • HMX	• Nitrobenzene (Surrogate)
* • RDX	* • 2,4,6-Trinitrotoluene
* • 1,3,5-Trinitrobenzine	• 2-AM-Dinitrotoluene
• 1,3 Dinitrobenzine	• 2,4 Dinitrotoluene

* - Indicates Commonality to BANGBOX SERIES Lists